UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,332	09/08/2003	Brett Green	200205494-1	1205

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/657,332	GREEN ET AL.
	Examiner	Art Unit	
	CHAN S. PARK	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 September 2003</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-33</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>08 September 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

DOUGLAS Q. TRAN
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim are objected to because of the following informalities:

Claim 2, line 1, "an indicator" should be -- said indicator --;

Claim 2, line 2, "an indicator" should be -- said indicator --;

Claim 17, line 2, "a current" should be -- said current --; and

Claim 18, line 3, "a current" should be -- said current --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 10, 16, 19 and 28 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

2.   With respect to claim 1, it recites the limitation "interrupting printing of a current

print job in said print queue upon reaching a boundary location". It is unclear as to what

is being reached to the boundary location. Is it a pointer in the print queue or a sensor

that reaches/detects an edge of a physical printing medium ejected having the printed

page/image thereon? If it is a pointer, where is it described in the Specification or the

claim? Furthermore, the boundary location appears to be something that is defined

within the print job. If it is the print job which is to be reached to the boundary location, it

is unclear as to how the print job reaches the boundary location which is a part of the

print job itself. Clarification/explanation as to what exactly is being reaches and how it is

being reached at the boundary location from the Specification is respectfully requested.

3.   With respect to claims 10, 16, 19 and 28, arguments analogous to those

presented for claim 1, are applicable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

Claims 1-6, 8-13, 15-24, 26-31 and 33 are rejected under 35 U.S.C. 102(e) as

being anticipated by Tuchitoi et al. U.S. Patent No. 6,906,813 (hereinafter Tuchitoi).

4.   With respect to claim 1, Tuchitoi teaches a method for controlling printing of print

jobs in a printing device, said print jobs residing in a print queue for sequential printing

(figs. 2 & 3), comprising:

in response to a first signal received at said printing device (fig. 7 & col. 12, lines

23-26), interrupting printing of a current print job in said print queue upon reaching a

boundary location (note that the interruption of the print job never occurs at the middle

of a page but at the end of the page according to col. 15, line 64 ~ col. 16, line 2);

storing an indicator associated with said interrupted print job (col. 16, lines 3-14 &

col. 17, lines 16-43);

storing identifiers of said print jobs in said print queue in a memory of the printing

device (fig. 12);

selecting from said memory at least one of said identifiers corresponding to

another print job (job ID 4 in fig. 12) and printing said selected print job (col. 17, lines

30-43); and

in response to a second signal, resuming printing of the previously interrupted

print job according to said indicator (col. 16, lines 22-29 & col. 17, lines 30-43).

5.   With respect to claim 2, Tuchitoi teaches the method of claim 1, wherein said

storing said indicator associated with said interrupted print job comprises storing said

indicator of the boundary location at which the current print job was interrupted (col. 17,

lines 30-43 & fig. 12).

6.   With respect to claim 3, Tuchitoi teaches the method of claim 2, wherein printing

of said interrupted print job is resumed at said boundary location (col. 16, lines 22-29 &

col. 17, lines 30-43).

.7.   With respect to claim 4, Tuchitoi teaches the method of claim 3, wherein said

boundary location is a page boundary (col. 17, lines 30-43).

8.   With respect to claim 5, Tuchitoi teaches the method of claim 1, wherein at least

one of said first signal and said second signal is caused by a user operating a control on

the printing device (col. 17, line 61 – col. 18, line 15).

9.   With respect to claim 6, Tuchitoi teaches the method of claim 1, wherein at least one of said first signal and said second signal is caused by a user operating a control on a peripheral device in operable communication with said printing device (col. 10, lines 35-43).

10.   With respect to claim 8, Tuchitoi teaches the method of claim 1, further comprising verifying an authorization of a user requesting interruption of the current print job prior to said interruption of printing (col. 9, lines 38-40).

11.   With respect to claim 9, Tuchitoi teaches the method of claim 1, wherein said storing identifiers of said print jobs in said print queue in a memory of the printing device comprises storing one or more of: user name requesting said print job, host device, and print job name (col. 9, lines 38-40).

12.   With respect to claim 10, Tuchitoi discloses a printing device for carrying out print jobs (figs. 2 & 3), comprising:

        storage means for storing print jobs in the printing device for sequential printing (figs. 10 & 12);

        means for selecting one of a first mode of operation and a second mode of operation of said printing device (fig. 7 & col. 12, lines 23-26);

        means responsive to selection of said second mode of operation for determining a boundary location associated with a current print job for printing and for interrupting printing of said current print job upon reaching said boundary location (note that the interruption of the print job never occurs at the middle of a page but at the end of the page according to col. 15, line 64 ~ col. 16, line 2);

means for storing an indicator of said boundary location associated with said

interrupted print job (col. 16, lines 3-14 & col. 17, lines 16-43);

means for selecting and printing another one of the print jobs in said storage

means (col. 17, lines 30-43); and

means responsive to de-selection of said second mode of operation for resuming

printing of the interrupted print job according to said indicator (col. 16, lines 22-29 & col.

17, lines 30-43).

13.   With respect to claim 11, Tuchitoi discloses the device of claim 10, wherein said

boundary location is a page boundary (col. 17, lines 30-43).

14.   With respect to claim 12, Tuchitoi discloses the device of claim 10, wherein said

means for selecting one of said first mode of operation and second mode of operation

comprises a user-operated control disposed on said printing device (col. 17, line 61 –

col. 18, line 15).

15.   With respect to claim 13, Tuchitoi discloses the device of claim 10, wherein said

means for selecting one of said first mode of operation and second mode of operation

comprises a user-operated control disposed remote from said printing device and in

operable communication with said printing device over a communications network (col.

10, lines 35-43).

16.   With respect to claim 15, Tuchitoi discloses the device of claim 10, further

comprising means for verifying an authorization of a user requesting interruption of the

current print job prior to said interruption of printing (col. 9, lines 38-40).

17.   With respect to claim 16, Tuchitoi teaches a method for controlling printing of

print jobs in a printing device, said print jobs residing in a print queue for sequential

printing (figs. 2 & 3), comprising:

sensing a request from a user to interrupt printing of a current print job (fig. 7 &

col. 12, lines 23-26);

determining a page boundary location associated with the current print job being

printed and interrupting printing of the current print job upon reaching the page

boundary (note that the interruption of the print job never occurs at the middle of a page

but at the end of the page according to col. 15, line 64 ~ col. 16, line 2);

storing an indicator of the page boundary at which the current print job was

interrupted (col. 16, lines 3-14 & col. 17, lines 16-43);

storing an identifier of each print job in said print queue in a memory of the

printing device (fig. 12);

retrieving a user-selected identifier from said memory corresponding to another

one of the print jobs in said print queue and printing said another print job (col. 17, lines

30-43);

sensing a request from a user to resume printing of said interrupted print job (col.

8, lines 10-19 & col. 19, lines 50-62); and

retrieving said indicator of said page boundary and resuming printing of the

previously interrupted print job at the page boundary at which the job was interrupted,

whereby upon completion of printing said previously interrupted print job, remaining

print jobs residing in said print queue are printed in sequential order (col. 16, lines 22-29 & col. 17, lines 30-43).

18.   With respect to claim 17, Tuchitoi teaches the method of claim 16, further comprising providing a user-operated control on the printing device for causing a request to be transmitted to interrupt printing of the current print job (col. 17, line 61 – col. 18, line 15).

19.   With respect to claim 18, Tuchitoi teaches the method of claim 16, further comprising providing a user-operated control on a host device coupled to the printing device for causing a request to be transmitted from the host device to interrupt printing of the current print job (col. 10, lines 35-43).

20.   With respect to claim 19, arguments analogous to those presented for claim 1, are applicable.

21.   With respect to claim 20, Tuchitoi discloses the computer readable medium of claim 19, wherein said computer-executable instructions further control operation of said processor for determining said boundary location and storing an indicator of the boundary location at which the current print job was interrupted (col. 16, lines 22-29 & col. 17, lines 30-43).

22.   With respect to claim 21, Tuchitoi disclose the computer readable medium of claim 20, wherein said computer-executable instructions further control operation of said processor for resuming printing of said interrupted print job at said boundary location (col. 16, lines 22-29 & col. 17, lines 30-43).

23.   With respect to claim 22, arguments analogous to those presented for claim 4,

are applicable.

24.   With respect to claim 23, arguments analogous to those presented for claim 5,

are applicable.

25.   With respect to claim 24, arguments analogous to those presented for claim 6,

are applicable.

26.   With respect to claim 26, arguments analogous to those presented for claim 8,

are applicable.

27.   With respect to claim 27, arguments analogous to those presented for claim 9,

are applicable.

28.   With respect to claim 28, Tuchitoi discloses a printing device for carrying out print

jobs, comprising:

        a print queue for storing print jobs in said printing device for sequential printing

(figs. 10 & 12);

        a user interface operable for selecting one of a first mode of operation and a

second mode of operation of said printing device (fig. 7 & col. 12, lines 23-26);

        a processor responsive to user selection of said second mode of operation for

determining a boundary location associated with a current print job for printing and for

interrupting printing of said current print job upon reaching said boundary location (note

that the interruption of the print job never occurs at the middle of a page but at the end

of the page according to col. 15, line 64 ~ col. 16, line 2);

memory for storing an indicator of said boundary location associated with said

interrupted print job (col. 16, lines 3-14 & col. 17, lines 16-43);

wherein said processor causes said print jobs in said print queue to be stored in

a memory location accessible using the user interface for enabling user selection (fig.

12) and initiation of printing of another one of the print jobs in the print queue, and

wherein, in response to de-selection of the second mode of operation at said user

interface (col. 8, lines 10-19), said processor operates to resume printing of the

interrupted print job according to said indicator (col. 16, lines 22-29; col. 17, lines 30-43;

& col. 19, lines 50-62).

29.   With respect to claim 29, Tuchitoi discloses the device of claim 28, wherein said

boundary location is a page boundary (col. 17, lines 30-43).

30.   With respect to claim 30, Tuchitoi discloses the device of claim 28, wherein said

user interface comprises a user-operated control panel disposed on said printing device

(col. 17, line 61 – col. 18, line 15).

31.   With respect to claim 31, Tuchitoi discloses the device of claim 28, wherein said

user interface comprises a user-operated control panel disposed remote from said

printing device and in operable communication with said printing device over a

communications network (col. 10, lines 35-43).

32.   With respect to claim 33, Tuchitoi discloses the device of claim 28, wherein said

user interface further includes a control input for enabling a user to enter a code for

verifying an authorization of said user requesting interruption of the current print job

prior to said interruption of printing (col. 9, lines 38-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuchitoi

as applied to claim 6 above, and further in view of Hatta et al. U.S. Patent Application

Pub. No. 2005/0117948 (hereinafter Hatta).

33.   With respect to claim 7, Tuchitoi teaches the method of claim 6, but it does not

explicitly teach that said peripheral device is a host computer having a web browser in

operable communication with a web server in said printing device over a communication

network, to provide user control for generating at least one of said first signal and said

second signal.

Hatta, the same field of endeavor of the print job interruption field, teaches the

method of using a web browser in a host computer to provide user control for

generating interruption/priority command to the existing print queue (paragraph 102).

At the time of the invention, it would have been obvious to one of ordinary skill in

the art to implement the web browser of Hatta into the printing system of Tuchitoi.

The suggestion/motivation for doing so would have been to access/control the

print job in the printer via Internet by providing user-friendly GUI.

Therefore, it would have been obvious to combine Tuchitoi with Hatta to obtain

the invention as specified in claim 7.

Claims 14, 25, and 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Tuchitoi as applied to claim 13, 24 and 31 respectively above, and

further in view of Hatta.

34.   With respect to claims 14, 25, and 32, arguments analogous to those presented

for claim 7, are applicable.

Contact Information

35.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-

7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Chan S. Park
Examiner
Art Unit 2625

csp
August 1, 2007

DOUGLAS Q. TRAN
PRIMARY EXAMINER